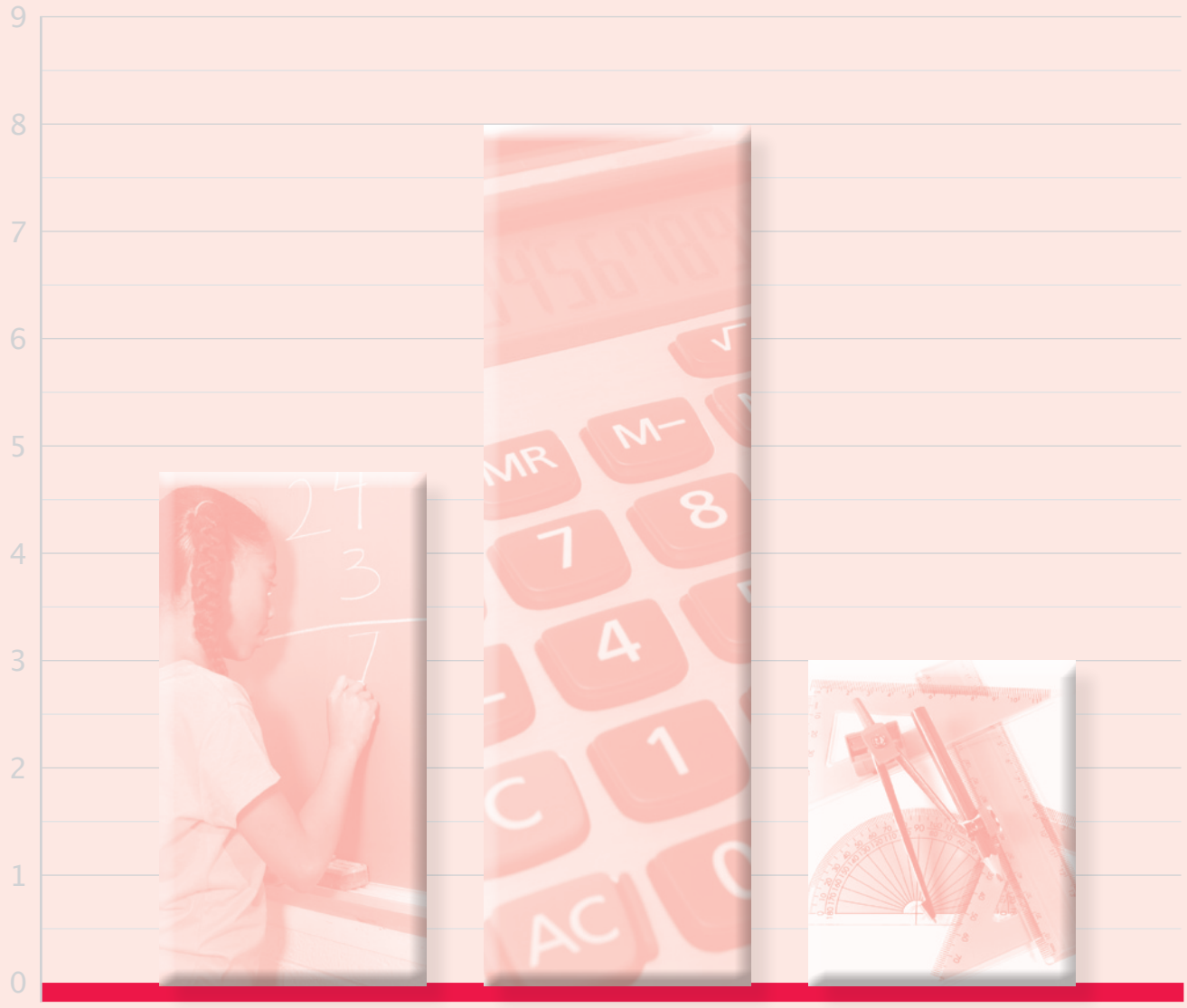
3rd
4th
5th
6th
7th
8th

Grade 3

meap™
Michigan Educational Assessment Program

Item Descriptors



MATHEMATICS

FALL 2010

MICHIGAN STATE BOARD OF EDUCATION
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NOTE: For each item listed throughout this booklet, the first statement is a summary of the Michigan Grade Level Content Expectation (GLCE) and the second statement is the descriptor for the item's stem or question.

Students were instructed to read the directions below silently as the test administrator read them aloud.

PART 1

DIRECTIONS

This test has two parts. You may **NOT** use a calculator on any part of this test. You may use open space in this test booklet for scratch paper.

The items on this test are all multiple-choice. Multiple-choice items require you to choose the best answer from among three answer choices. Mark your answer in your test booklet by completely filling in the bubble next to the correct answer. Use only a No. 2 pencil to mark your answer in your test booklet. If you erase an answer, be sure to erase it completely.

Be careful not to make any marks in the bubbles next to the letters A, B, or C except for the one that goes with your answer. You may **NOT** use any other paper to do your work.

Sample Multiple-Choice Item:

Julia had $5.00. She spent $2.54. How much money did she have left?

○ **A** $7.54

○ **B** $3.54

● **C** $2.46

For this sample item, the correct answer is **C**. Circle **C** is filled in.

Once you have reached the word **STOP** in your test booklet, do **NOT** go on to the next page.

If you finish early, you may check your work in Part 1 of the test **ONLY**.

Do **NOT** look at items in Part 2 of the test.

NOTE: The directions for Part 2 are the same as the above instructions.

1 **N.ME.02.01:** Count to 1000 by 1s, 10s, and 100s.

Skip-count by 10s.

A 10 less than correct answer

B correct

C 10 more than correct answer

2 **N.ME.02.01:** Count to 1000 by 1s, 10s, and 100s.

Skip-count by 100s.

A added 1, not 100

B added 99, not 100

C correct

3 **N.ME.02.02:** Read and write numbers to 1000.

Translate word form into standard form.

A put hundreds in tens place, did not include tens place

B correct

C put hundreds in thousands place

4 **N.ME.02.02:** Read and write numbers to 1000.

Select the block model that matches the given word form of number.

A correct

B transposed 10s blocks with 100s blocks

C correct 1s and 10s but included unneeded 100s blocks

5 **N.ME.02.03:** Compare and order numbers to 1000.

Find the missing value in a compound inequality.

A incorrect value, satisfies only part of inequality

B incorrect value, satisfies only part of inequality

C correct

6 **N.ME.02.03:** Compare and order numbers to 1000.

Select the number that is greater than one number and less than another number.

A correct

B value less than range given

C value greater than range given

7 **N.FL.02.06:** Decompose 100 into addition pairs, e.g., 99 + 1.

Given the addend, select an addend to give the sum of 100.

A addition pair gives sum of 90

B addition pair gives sum of 110

C correct

8 **N.ME.02.06:** Decompose 100 into addition pairs, e.g., 99 + 1.

Select the addition pair that has a value of 100.

A correct

B addition pair gives sum of 90

C addition pair gives sum of 110

9 **N.MR.02.07:** Find the distance between numbers on a number line.

Given two points on a number line, find the distance in units.

A correct

B 3 units more than solution

C subtracted smaller values from larger values

10 **N.MR.02.07:** Find the distance between numbers on a number line.

Given two points on a number line, find the distance in units.

A 4 units short

B 2 units short

C correct

11 **N.MR.02.08:** Solve a problem such as 42 + ___ = 57.

x + ___ = y

A addends sum to 10 fewer than total

B correct

C addends sum to 10 more than total

12 **N.MR.02.08:** Solve a problem such as 42 + ___ = 57.

x – ___ = y

A 10 fewer than correct subtrahend

B correct

C 10 greater than correct subtrahend

13 **N.MR.02.09:** Solve story problems with objects and pictures.

Given the minuend and subtrahend, find the difference.

A correct

B subtracted in tens place but added in ones place

C added instead of subtracted

14 **N.MR.02.09:** Solve story problems with objects and pictures.

Given the minuend and subtrahend, find the difference.

A incorrect value in tens place

B correct

C subtracted smaller values from larger values

15 **N.FL.02.10:** Add fluently two numbers through 99.

Add two 2-digit numbers.

A subtracted instead of added

B 10 fewer than sum

C correct

16 **N.FL.02.10:** Add fluently two numbers through 99.

Subtract two 2-digit numbers.

A correct

B subtracted smaller values from larger values

C added instead of subtracted

17 **M.PS.02.02:** Compare, add, and subtract lengths.

Given two lengths in inches, find the difference.

A correct

B subtracted smaller values from larger values

C added in ones place

18 M.PS.02.02: Compare, add, and subtract lengths.

Find the greatest length.

A middle length

B least length

C correct

19 M.UN.02.06: Use the concept of duration of time.

Identify the clock that matches a given time plus a half hour.

A given time

B correct

C given time minus half hour

20 M.UN.02.06: Use the concept of duration of time.

Find the difference between times, given a starting time on a clock face.

A 30 minutes less than difference

B 20 minutes less than difference

C correct

21 M.UN.02.07: Read and write money amounts using decimal notations.

Translate the word form for an amount in cents to decimal notation.

A dollars instead of cents

B correct

C hundredths of cents instead of cents

22 M.UN.02.07: Read and write money amounts using decimal notations.

Translate the word form of a mixed amount to decimal notation.

A used both dollar and cent notation

B cents instead of dollars

C correct

23 **M.PS.02.10:** Solve simple word problems in length and money.

Find the total distance, given two distances.

A subtracted instead of added

B subtracted smaller values from larger values

C correct

24 **M.PS.02.10:** Solve simple word problems in length and money.

Find the total amount of value of a given set of coins.

A subtracted value of one set of coins from other set

B correct

C 10 cents more than correct total

25 **M.TE.02.11:** Determine the perimeters of rectangles and triangles.

Given the perimeter, match it to triangle with all lengths given.

A one unit greater than correct perimeter

B 12 units greater than correct perimeter

C correct

26 **M.TE.02.11:** Determine perimeters of rectangles and triangles.

Find perimeter of rectangle with all lengths given.

A length + width

B correct

C area = perimeter

27 **G.GS.02.01:** Identify, describe, and compare 2-D and 3-D shapes.

Identify the name of a 3-D shape, given a diagram.

A 2-D version of shape

B correct

C incorrect 3-D shape

28 **G.GS.02.01:** Identify, describe, and compare 2-D and 3-D shapes.

Identify a list of 3-D shapes.

A list contains two 2-D shapes

B correct

C list contains one 2-D shape

29 **G.GS.02.02:** Putting together, and taking apart 2-D and 3-D shapes.

Identify shapes resulting from taking apart a 2-D shape.

A incorrect shapes

B incorrect shapes

C correct

30 **G.GS.02.02:** Putting together, and taking apart 2-D and 3-D shapes.

Identify the result of putting two 3-D shapes together.

A 2-D version of shape

B correct

C incorrect 2-D version of shape

31 **G.SR.02.05:** Classify familiar plane and solid objects.

Place a shape into the group of shapes with same number of sides.

A different number of sides

B different number of sides

C correct

32 **G.SR.02.05:** Classify familiar plane and solid objects.

Name a 3-D shape, given its characteristics.

A correct

B incorrect 3-D shape

C incorrect 3-D shape

33 **G.TR.02.06:** Recognize transformed shapes.

Identify the flip of a shape.

A rotation

B translation

C correct

34 N.FL.02.11: Estimate the sum of two numbers with three digits.

Estimate the sum of two 3-digit numbers to the nearest 50.

A underestimate

B correct

C overestimate

35 M.UN.02.05: Tell time using a.m. and p.m.

Given a picture of an analog clock, translate the time to words.

A one hour greater than correct time

B transposed hour hand and minute hand

C correct

36 N.ME.02.18: Recognize, name, and write halves, thirds, and fourths.

Match the given fraction to the model of a fraction strip.

A ratio of shaded portion to non-shaded portion

B complement of fraction

C correct

37 N.ME.02.19: Recognize, name, and write halves, thirds, and fourths.

Translate the word form of a fraction into a/b.

A reciprocal, i.e., b/a

B correct

C a/(b – a)

38 N.MR.02.16: Given a situation with groups of equal size, represent them.

Match a context of equal sharing to a model.

A model switches number of groups with number in group

B correct

C model shows unequal sharing

39 M.UN.02.03: Measure area using non-standard units.

Determine the number of squares needed to cover the polygon.

A one less than required number of squares

B correct

C one more than required number of squares

40 M.TE.02.04: Find the area of a rectangle using whole units.

Find the dimensions of the rectangle in square units using the grid.

A correct width, incorrect length

B correct

C incorrect width, incorrect length

41 N.MR.02.13: Know multiplication as counting objects in a set of equal groups.

Represent multiplication as repeated addition.

A correct

B $a \times b = a + a + b + b$

C $a \times b = a + b$

42 D.RE.02.03: Solve problems using pictographs; include scales.

Interpret the given pictograph with a scale of 2.

A incorrect total

B correct

C incorrect total

43 N.MR.02.14: Represent multiplication using area and array models.

Identify the array that matches the given expression.

A array with incorrect number of rows

B array with incorrect number of columns

C correct

44 N.ME.02.22: Recognize fractions that are equal to the whole.

Identify the fraction that is equal to one whole.

A numerator = 1

B numerator = 1

C correct

45 D.RE.02.01: Make pictographs using a scale representation.

Identify the pictograph that matches the given information.

A did not apply scale

B incorrect total

C correct

46 G.GS.02.04: Know curved and straight lines, and curved and flat surfaces.

Identify the shape with a curved surface.

A correct

B shape with all flat surfaces

C shape with all flat surfaces

47 N.ME.02.20: Place 0 and halves on a number line; relate to a ruler.

Find the location of the mixed number on a number line.

A less than solution

B correct

C greater than solution

48 D.RE.02.02: Read and interpret pictographs with scales of 2 or 3.

Interpret the pictograph with a scale of 2.

A did not apply scale

B correct

C minuend instead of difference

49 M.PS.02.08: Add and subtract money in mixed units.

Add a whole number of dollars to dollars and cents.

A added dollars as cents

B correct

C added dollars as dollars but also dollars as dimes

50 G.LO.02.07: Find and name points using simple coordinate systems.

Find the location of a point on a coordinate grid.

A (y, x)

B correct

C (x – 1, y – 1)

51 N.ME.02.21: Know unit fractions and denominators.

Identify the unit fraction with the greater value than the given unit fraction.

A correct

B fraction with smaller value

C fraction with smaller value

52 N.MR.02.15: Know division as another way to multiply; use fact families.

Identify the fourth member of the fact family.

A not in fact family

B not in fact family

C correct

53 M.UN.02.09: Read temperature in °F.

Read the temperature using the scale on a thermometer in °F.

A did not use scale

B correct

C read from top down

3rd

4th

5th

6th

7th

8th

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